OFFICE OF PUBLIC INSTRUCTION
PO BOX 202501
HELENA MT 59620-2501
www.opi.mt.gov
(406) 444-3095
(888) 231-9393
(406) 444-0169 (TTY)

Linda McCulloch
Superintendent

Grade 4 Math Performance Level Descriptors

Advanced	Students at this level demonstrate a comprehensive and in-depth understanding of rigorous subject matter. • Select and use multiple problem solving strategies to solve complex problems involving the four operations and clearly communicate strategies • Read, identify, and interpret place value of numbers to 1 million and apply in problem solving situations • Solve multi-step addition and subtraction problems involving whole numbers and decimals with multiple regroupings • Solve multi-step multiplication problems with multi-digit numbers with multiple regrouping • Divide by two-digit divisor and interpret remainder • Solve problems involving addition and subtraction of simple fractions with common denominators and recognize equivalent fractions • Use and apply strategies and procedures to solve complex multi-step algebraic problems involving equations, number patterns, geometric patterns, and change and clearly describe the relationship • Use properties and extensive vocabulary to describe and identify two- and three-dimensional figures and the relationships among them • Solve complex geometric problems involving points on coordinate grids, symmetry, transformations, visual and spatial reasoning and clearly communicate strategies • Apply tools, procedures, and formulas of measurement to solve complex problems • Collect, organize, display, read, and interpret complex data and use data in problem solving situations and find all possible outcomes of an experiment
Proficient	Students at this level demonstrate a solid understanding of challenging subject matter • Select and use problem-solving strategies to solve multi-step problems involving the four operations and clearly communicate strategies • Read, identify, and interpret place value of numbers to 1 million • Solve addition and subtraction problems involving whole numbers and decimals with multiple regroupings • Solve multiplication problems with multi-digit numbers with multiple regrouping • Divide by one-digit divisor and interpret remainder • Add and subtract simple fractions with common denominators • Use and apply strategies and procedures to solve multi-step algebraic problems involving equations, number patterns, geometric patterns, and change and clearly describe the relationship • Use properties and vocabulary to describe and identify two- and three-dimensional figures and the relationships among them • Solve geometric problems involving points on coordinate grids, symmetry, transformations, visual and spatial reasoning and clearly communicate strategies • Apply tools, procedures, and formulas of measurement to solve problems • Collect, organize, display, read, and interpret data and use data in problem solving situations and judge the probability of a simple event as impossible, unlikely, likely, or certain and determine which outcomes are most or least likely

Nearing Proficiency	Students at this level demonstrate a partial understanding of subject matter. • Select and use problem-solving strategies to solve two-step problems involving the four operations and communicates strategies with limited organization or support information • Read, identify, and interpret place value of numbers to 100,000 • Solve addition and subtraction problems with whole numbers and decimals with limited regrouping • Multiply three-digit numbers by one digit numbers with multiple regrouping • Divide by one-digit divisor • Add and subtract simple fractions with common denominators with models • Use and apply strategies and procedures to solve algebraic problems involving equations, number patterns, geometric patterns, and change • Use properties and limited vocabulary to describe and identify two- and three-dimensional figures • Solve geometric problems involving, symmetry, transformations, visual and spatial reasoning and describe direction and position using the cardinal directions • Select and apply appropriate units, tools, and simple formulas to use in everyday measurement situations • Collect, organize, display, read, and interpret data and judge the probability of a simple event as impossible, unlikely, likely, or certain and determine which outcomes are most or least likely
Novice	Students at this level demonstrate a minimal understanding of subject matter. • Solve two-step problems involving the four operations and communicates strategies without organization or support information • Read and identify place value of numbers using models • Solve addition and subtraction problems with limited regrouping • Multiply numbers with limited or no regrouping • Divide numbers with basic facts • Solve simple problems involving basic fractions • Use and apply strategies and procedures to solve simple algebraic problems involving equations, number patterns, geometric patterns, and change • Recognize and name two- and three-dimensional figures • Solve geometric problems involving symmetry, visual and spatial reasoning, and use simple vocabulary to describe direction and position on a grid • Select and apply appropriate units and tools to use in everyday measurement situations • Collect, display, read, and interpret data and judge the probability of a simple event as impossible, unlikely, likely, or certain and determine which outcomes are most or least likely